

BACKGROUND

- Approximately **1.3 million** adults identify as transgender in the United States (US)
- 97%** of patients desired or had undergone gender-affirming top surgery with a complication rate of **~4.7%**
- Leads to:
 - Improvement in quality of life and self-confidence
 - Decreased gender dysphoria

PROBLEM

- Patients undergoing gender-affirming mastectomy (GAM) have experienced **acute intraoperative bradycardia** with **unclear etiology**

AIMS

- Describe the **frequency** of acute intraoperative bradycardia in patients undergoing GAM at our institution
- Identify potential **risk factors** that could be contributing to its occurrence

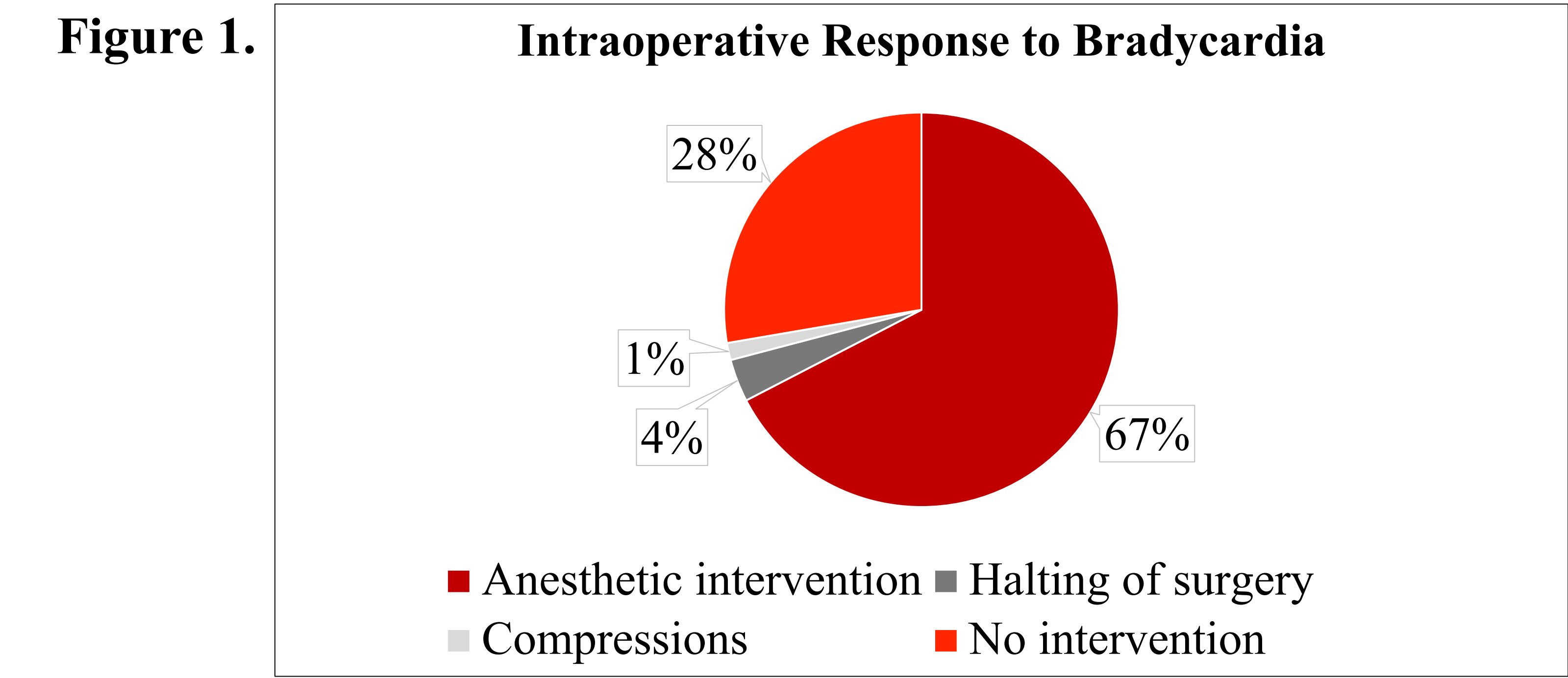
METHODS

- Retrospective comparison of all patients who underwent GAM at a single institution (2018-2023), who **did** or **did not** experience intraoperative bradycardia

- Intraoperative bradycardia:
 - Acute change in heart rate after induction of anesthesia below **60 BPM**
- Preoperative and Intraoperative :
 - Demographics, comorbidities, hormone therapy, antidepressants
 - Induction agents, intraoperative vitals, regional blocks, type of surgery
- For bradycardic patients’, additional variables collected:
 - What anesthetic intervention performed, halting of surgery, chest compressions

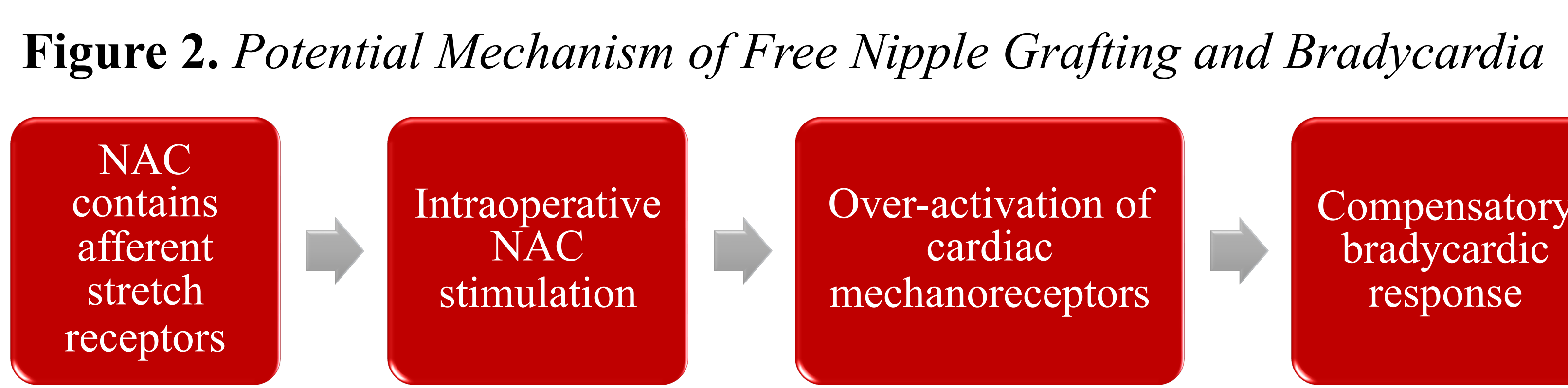
Table 1. Patient Characteristics and Intraoperative Variables

Characteristics	n (%)
Total Patients	337
BMI	Median 28.65; IQR 10.3
Age	Median 25; IQR 9
Comorbidities	
None	243 (72.1)
Hypertension	19 (5.6)
Ischemic Heart Disease	1 (0.3)
Cardiomyopathy	1 (0.3)
Cardiac Arrhythmias	0 (0)
Stroke	2 (1.0)
Diabetes	9 (2.7)
Hyperlipidemia	20 (5.9)
Kidney Disease	2 (1.0)
Sleep Apnea	18 (4.7)
Asthma	56 (16.6)
Hormone therapy	
Yes	257 (76.3)
No	80 (23.7)
Antidepressant Use	
Yes	125 (37.1)
No	212 (62.9)
Surgical Technique	
Double incision mastectomy with FNG	295 (87.5)
Double incision mastectomy w/o FNG	42 (12.5)
Anesthesia Intervention	
Yes	97 (67.4)
No	47 (32.6)
Surgery Halted	
Yes	5 (3.5)
No	139 (96.5)



RESULTS

- 42.7%** of patients experienced acute intraoperative bradycardia
- Risk factors associated with increased risk of bradycardia
 - Increased age (p < 0.001)
 - SSRI-use (p < 0.001)
 - Prior difficulty with anesthesia (p = 0.017)
 - Free nipple grafting (p = 0.019)
- The use of hormone therapy was **not** associated with intraoperative bradycardia (p= 0.68)



CONCLUSIONS

- Acute intraoperative bradycardia frequently occurs during gender-affirming mastectomy
- Antidepressant use, prior difficulty with anesthesia, and free nipple grafting** are associated with increased risk of bradycardia
- Future studies will compare this cohort to other breast surgeries

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